The three careers of Hans Hinzpeter

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Figure 1: Prof. Dr. Hans Hinzpeter †

My first intensive meeting with Hans Hinzpeter took place on the maiden voyage of the "Polarstern" in 1983 in the Antarctic. For him, this journey was the fulfilment of a life-long desire. Later he wrote in his correct German trained by reading Fontane: It was so lovely to be able to fulfil my intention at long last, and to enjoy this unique landscape, the absolute peace of the shelf ice, the clear air and the beauty of the polar summer. During this voyage, I was fascinated at his pleasure in atmospheric phenomena such as mock suns, sea smoke and the famous grey ray. He spent hours watching clouds building up over the pack ice or the polar lights. He explained all these phenomena together with the principles of polar meteorology with the interaction of the continent and open, ice-covered sea during evening lectures on board, making it easy to understand for the navigators and ship's engineers, as well as the biologists, who he treated with fatherly leniency and even benevolence.

He acquired practice in dealing with students from other faculties during the 1980s as lecturer with the Deutsche Volk student foundation. He would get his scholarship students to report about their work, and gave them his insights into German and Prussian history. Hinzpeter had learnt the art of interdisciplinary conversation in the early 1950s on the Potsdam "Telegraphenberg". Together with the meteorological observatory, this location also housed the world-famous institutes for geomagnetics, astrophysics and geodesy.

On our voyage, we were naturally interested in the weather forecasts, all the better for being long-term and precise. This was the responsibility of the meteorologist on board, who in those days still used a pointed nib and thick red and blue pens to draw the weather map. Reading and Offenbach were a long, long way away and any satellite pictures we could receive at all tended to be rather meagre. The fewer the messages passed on by the weather radio operators, the more the meteorologist had to rely on his intuition. During the joint weather discussions, Hinzpeter was always critically respectful of this work, which he had experienced himself with a similar lack of data during the war. Like the other meteorologists of his generation, he attributed weather forecasts more to art than to precise science. Meanwhile, art has been replaced by numerical models and satellite pictures. On the "Polarstern", we had the great fortune with Mr. Hinzpeter of being able to see the old and the new method of weather forecasting, and at the same time to experience the central role played by a knowledge of the interaction of ocean, ice and atmosphere when we want forecasts that go beyond just a few days.

Years later, Hinzpeter ascertained that Polarstern is an instrument of power, but you have to have power to do good. This sentence about the correct use of the "Polarstern" says a lot about Hinzpeter's role in setting up the Alfred Wegener Institute for Polar and Oceanic Research (AWI). This was a role he shared above all the geophysicist Walter Kertz from Braunschweig. Both had been appointed by the Deutsche Forschungsgemeinschaft (German Research Community) to be members of the scientific advisory board and the board of trustees for the institute. They saw their task in strengthening the AWI and helping it become an assistant to the universities and partner for the federal institutes and other research establishments. Without any trace of specialist egotism, which in itself is not rare among members of advisory boards, everyone made every effort to sat-

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isfy all disciplines. Even during the early discussions about the institute's statutes, Hinzpeter had urged the need for clear responsibilities and decision-making processes. Referring to university bodies, he later said *I never quite understood the reasons for democratisation*. His entrenched, at times sarcastically expressed opinions about "God and the world" contradicted the spirit of the times.

As a warning voice and even judge on an internal level and spokesman to the outside – this is how I saw the institute's two great external consultants. Both enjoyed great respect both among members of the institute and in the German research community and donors in Bonn and Bremen alike.

As chairman of the scientific advisory council, Hans Hinzpeter introduced regular audits of the institute's specialist departments, reviewing both the scientific achievements and also the willingness for scientific cooperation within the institute on a national and international level. He was extremely sensitive to scientific "foam" and tricks. He attached great importance to the institute's scientific staff taking part in academic teaching. He was always solicitous toward the younger generation of scientists, urging and encouraging them to greater achievements, even when the youngsters themselves and their external appearance didn't always conform to his sense of neat, tidy orderliness.

Mr. Hinzpeter set no great store by the work on international bodies and international activism, although this does not mean he had no foreign experience. He was already a representative on the IAMAP at the end of the 1950s. Karl Brocks introduced him to the international coordination of GATE, where he assumed the part for Germany after Brock's death. Twelve months as visiting professor at the University of California Los Angeles in 1966 made him familiar with American research and academic institutions to such an extent that his later assessments of scientific achievements never floundered on a provincial level.

Three careers

In his reserved, modest nature, Hans Hinzpeter has left behind very little information about his life and his thinking. Unfortunately, his wife, who accompanied him faithfully through all stages of his working life, died very soon after him, so that we no longer have the chance to ask her in particular about the early years in East Germany. All the more important then is the interview with Hans Hinzpeter published by Hans von Storch and Klaus Fraedrich in 1995 in preparation of his 75th birthday, which he himself had looked through. Dr. Bakan has gathered some other material. But all this is only sufficient to produce a brief sketch which can be added to, supplemented and corrected by anyone who was involved with Hans Hinzpeter over a longer period of time. Hans Hinzpeter came from a teaching family in Berlin-Karlshorst. During the war he studied meteorology, physics and geophysics in Berlin and then served as a meteorologist for the Air Force. In the 50 years following the war, Hinzpeter's scientific life can be divided into three careers as a result of political developments.

1. The end of the war

The intern working for the imperial weather service started to look for a lucrative job. He was a very successful radiation physicist at the meteorological observatory in Potsdam, where his scientific publications also gained international attention. As a member of the international radiation committee of the IAMAP, the door to foreign countries in the west was already a gap wide. He developed fruitful contacts to leading Soviet meteorologists resulting in an invitation to join two North Atlantic expeditions of the "Lomonossov" during the IGJ. At the young age of 37, he was appointed director of the observatory in Wahnsdorf near Dresden in 1958. This gave him responsibility for a large staff. His field of work expanded, because Wahnsdorf was involved in ozone research, air chemistry and monitoring the level of radio activity in the atmosphere. It was the time of the atom bomb tests. Political interference from the outside intensified, reducing the scope of freedom.

2. The Berlin Wall

In his CV for the Max Planck Society in 1975 his comments said: While I was attending a conference in Vienna in August 1961, the East German government changed its inner-German policy, which prompted me to move over to West Germany. His family happened to be in Freiburg at that time. The well established 40-year old observatory director became scientific research assistant for the "young Defant" at the institute for oceanography in Kiel. He qualified as a university lecturer and became a maritime meteorologist. From Kiel, he took part in the METEOR expeditions in the Indian Ocean and the tropical Atlantic. Since the METEOR was commissioned, Karl Brocks worked together with foreign colleagues to ensure that regular international projects were initiated which used the German research ships for large sections of the programmes. Hinzpeter had his share in and later led this cycle, although his career took him temporarily to Los Angeles, Freiburg and Mainz.

The greatest step in his career came in 1975. He became professor for meteorology at the University of Hamburg and soon afterwards, joint director of the new Max Planck institute for meteorology together with Klaus Hasselmann. Here he had a forming influence on measuring maritime oceanography. He always emphasised the importance of using both experiments and models together. Probes, satellites and host computers in his view were equal tools.

During his years in Hamburg, Hinzpeter exerted a fundamental influence on German meteorology. He recognised that in this day and age of global programmes and host computers, the many tiny meteorological setups at Germany's universities can only survive if they have joint focal programmes and work together in a mutually fruitful manner with other disciplines in special research areas. He learnt this from the oceanographers in Kiel. In those days, contacts between meteorologists was primarily limited to the professors' meetings in the DWD advisory council. The German GARP committee became the original nucleus for the DFG senate commission for atmospheric science, where Hans Hinzpeter was founder and chairman for many years (1976–1988). At the same time he became chairman of the German meteorological society. As member of the senate commission for oceanography, for 14 years he ensured that the interests of maritime meteorology were included in the plans for the METEOR voyages and new METEOR vessels, and made an essential contribution to ensuring that oceanography, glaciology, meteorology and paleoclimatology are seen as a unit in the context of the global change programmes. For decades he served on the scientific advisory council for the German weather service, and long after retiring, he still assessed German environmental research for the scientific advisory board and advised the Bavarian state government about the Bavarian climate research programme. His judgement was accepted and respected by all, so that he was confronted with more and more tasks: he became DFG expert for the physics of the atmosphere and physical oceanography, and chairman of two longterm focal programmes of the DFG for evaluation of the METEOR expeditions and for Antarctic research. He was involved in the assessment of special fields of research. All this on an honorary basis, with the "homework" entailed in studying the applications and reports having to be done at the weekends. It is thanks to the great, responsible commitment of a few central figures such as Hans Hinzpeter and countless individual experts that the expert assessment system implemented by the DFG became a world-famous instrument for research promotion, which helped to promote synergetic effects between various disciplines and research locations over and beyond a mere financial level. The rapidly growing promotion of research projects by the BMFT had to stand up to quality assessment according to the DFG standards.

3. Reunification

In 1990, the retired professor turned over night into one of the most important experts and institute founders in the hectic three years following reunification and reconstruction in eastern Germany. In his birthday interview in 1995, Hinzpeter said *Reunification was for me a great joy. When I was asked at the age of 70 to take part in* the evaluation and new establishment of scientific institutes in former East Germany, I was very glad to take up this challenge, because I believed that my past gave me a better insight into the situation people were facing over there rather than someone who had grown up in the West.

Restructuring in eastern Germany

Hinzpeter became a member of my scientific board group for the academy institutes for geo and cosmic sciences. I had urged that the pure research establishments of East Germany's meteorological service be included in the assessment, because these units were not compatible with the DWD concepts so that they fell between two stools. I also wanted to group together East Germany's secretly flourishing, broadly spread environmental research into competitive, interdisciplinary research units. Hans Hinzpeter was the ideal partner for this purpose. His voice was respected at the BMFT and DWD. His former colleagues in eastern Germany respected him for the work he had done in Potsdam and Wahnsdorf and felt that he understood them.

The expert groups consisted of about 8 western and eastern German professors and two civil servants from the ministry, together with helpful assistants from the scientific council who had performed all the written preparation on the basis of the documents submitted by the institutes. The visits to the institutes followed a fixed schedule: presentation of the institute's own appraisal of its situation and expectations for the future by the institute directors, followed by an inspection of the workplaces and a "headless" staff meeting without the institute's directors. The subsequent internal experts' meeting had to produce a vote about the quality and future of the institute's research groups with the aim of closing down the old institute and creating new establishments.

Within just a few months, our group had to assess about thirty research institutes and their branch establishments between the island of Rügen and the Erz Mountains, and develop a concept for converting them into new research units while at the same time reducing the staffing levels.

Most of the research units were turned into "blue list" (Blaue Liste) institutes at the universities. It was hoped that this would be the best way of fulfilling the two basic requirements issued by the scientific board: preserving the research potential and strengthening the universities.

As far as oceanography is concerned, the situation was relatively simple: only the academy institute for oceanography in Warnemünde was presented well. Compared to the strong establishments in the west of the country, it would need a niche to flourish in. This is why it was to concentrate primarily on the Baltic and take over Germany's Baltic monitoring tasks for the whole country. But this affected competences previously held in Kiel. Hans Hinzpeter didn't worry about this. He who had gone west in 1961 *not without scruples* was a tough, strong defender of the interests of the "home population" and warned us not to be self-just and self-proud – all without having to get loud about it. Steadfastness was needed later on particularly when it came to staffing plans and jobs in the new institutes. Here he was faced by entrenched interests in east and west, by honorary committees and ministerial bureaucracy.

On the meteorological front, a concept transpired in which the DWD was to take over the observatory in Potsdam together with famous observatory Lindenberg with its traditional aerology tasks in a generous interpretation of the weather service law. To Hinzpeter's great regret, it was not possible to hold on to the Wahnsdorf observatory.

Pure meteorological research was to be kept in part at the universities and concentrated in part at two institutes who divided the atmosphere into layers between them (as Hinzpeter explained it to us outsiders). Kühlungsborn saw the birth of the institute for atmosphere physics and Leipzig the institute for troposphere research, both clearly based on Hans Hinzpeter's recommendations. These new establishments have given a new face to atmosphere research in Germany. Klaus Hasselmann also recommended setting up the Potsdam Institute for Climate Impact Research (PIK) for the new field of interdisciplinary global change research, integrating the system model groups which had already existed in East Germany.

Hans Hinzpeter's favourite was the institute in Kühlungsborn for which he not only developed the concept during the assessment phase but was also directly responsible as chairman of the founding committee and as founding director up until 1993.

The time scale for setting up the institutions was extremely tight. Within 5 months, the legal and staffing prerequisites for the new institutes were to be created so that these could start work on 2 January 1992. The work of the foundation committees, which also included members of the federal and state governments, consisted in each case of sketching the specific technical focal emphases, ensuring that good researcher groups remained viable units and giving the staff a certain professional future. When filling the jobs, staff from Germany's new federal states were to be given preference, apart from the senior executive positions, but about 10% staff from the west were requested. The personnel decisions were very difficult and often very painful. The new alignment for the institutes which were to be devoted to innovative research with scarcely any routine work, demanded a strict selection for the limited number of jobs. The normal criteria - list of publications, mobility, experience abroad, teaching experience – could hardly match up to the professional CVs of the applicants.

Implementation of the recommendations made by the scientific board also included drawing up the statutes, covering the internal organisation and management structure, the search for a foundation director and the creation of an appointments committee (together with the university) for the final director. A selection committee was to be set up for the staff. The job structure of the institutes and their budget were to be negotiated with the donors. Cooperation with the university was to be put on the right track. Many practical questions had to be solved quickly. As far as the institute in Kühlungsborn is concerned, Hans Hinzpeter coped with all these tasks in an outstanding manner working together with his other colleagues there.

Conclusion

In three careers, Hans Hinzpeter's work not only as a researcher but also as a science politician has had a lasting effect on meteorology in Germany:

1. Following the war, he kept the flag flying for pure research in the observatories of the meteorological service in East Germany.

2. With the assistance of the DFG in particular, he has bundled and brought on meteorology in the Federal Republic. He bridged "academic" meteorology and the German weather service. In major international programmes, he linked maritime meteorology with oceanography.

3. On a mandate for the scientific advisory board and later for the BMFT and state governments of Mecklenburg-Vorpommern and Saxony, he helped to form the new structure for atmosphere sciences in eastern Germany.

His powerful, heaven-sent influence was not associated with holding a high office but with hard work in the bodies of the DFG, in advisory councils and consultation groups, with time-consuming study of files and archives and hours of listening patiently, during which he always made lots of notes. Meticulous in preparing and providing feedback for meetings, his clever, modest, fair, composed nature and his skill at putting things into words made him a highly appreciated chairman of such bodies, whose recommendations he represented compellingly to the outside. He helped his chosen discipline to make good progress but not at the cost of other disciplines. No colleague, no ministerial civil servant ever accused him of lusting for power or hinting at honours for the sake of false pride. He had a strict sense of order, duty and responsibility. He called himself a professional Prussian. It was these characteristics which made him an important helper and creator in the progress of German georesearch in the second half of the twentieth century.

Translation by Jacqueline Rohmann